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Amendments to the Specification

Please insert at page 26, line 10 of the specification as filed, after the heading Brief
Description of the Drawings and before the first paragraph in that section, the following paragraph:

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Please replace the first full paragraph on page 43 of the application as filed with the following, amended paragraph:

In an alternative embodiment, different PETs may be linked together in a single, longer immunogen for administration to an animal. The linker sequence can be flexible linkers such as GS, GSSSS SEQ ID NO. 615) or repeats thereof (such as three-peats).

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Please replace the Table titled "Commercial Anti-PET Antibodies" bridging pages 43-44 of the application as filed with the following, amended Table. Please note that only the SEQ ID NOs have been added to this Table. The underlined portions of the sequences in this Table appear underlined in the application as filed.

Commercial Anti-PET Antibodies

Protein	PTP (Immunogen/PET underlined)	Nearest Neighbors
Anti-Cyclin F	TASP <u>TSSVDGGL</u> GALP.K	SASIDGGL (SEQ ID NO. 617);
	(SEQ ID NO. 616)	SSSSDGGL (SEQ ID NO. 618);
		TGSVDGGA (SEQ ID NO. 619);
		ESSSDGGL (SEQ ID NO. 620)
Anti-phospho	FAGMPITLTVS <u>TSSLNLMA</u> ADCK	ISTASLNL (SEQ ID NO. 622);
SHC (Tyr239)	(SEQ ID NO. 621)	ISTSSLNV (SEQ ID NO. 623);
		VSLSSLNL (SEQ ID NO. 624);
		MDTSSLNL (SEQ ID NO. 625)
Anti-phospho-	EEEADINOLTEEFF.K	ADLNQLTQ (SEQ ID NO. 627);
PP2A (Tyr307)	(SEQ ID NO. 626)	RDINQLSE (SEQ ID NO. 628);
		ADFNQLAE (SEQ ID NO. 629);
		ADINMVTE (SEQ ID NO. 630)
Anti-Cdk8	ATS <u>QQPPQYSH</u> QTHR	QEPPQYSH (SEQ ID NO. 632);
	(SEQ ID NO. 631)	QQQPQFSH (SEQ ID NO. 633);
		QQPPQHSK (SEQ ID NO. 634);
		QQPPQQQH (SEQ ID NO. 635);

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Please replace the Table bridging pages 104-105 of the application as filed with the following, amended Table:

Protein Kinase	Recognition Motifs ^a	Phosphorylation Sites _b	Protein Substrate (reference)
cAMP-dependent Protein Kinase (PKA, cAPK)	R-X-S/T° R-R/K-X-S/T	Y ₇ LRRASLAQLT (SEQ ID NO. 636) F ₁ RRLSIST (SEQ ID NO. 637) A ₂₉ GARRKASGPP (SEQ ID NO. 638)	pyruvate kinase (2) phosphorylase kinase, a chain (2) histone H1, bovine (2)
Casein Kinase I (CKI, CK-1)	S(P)-X-X-S/T	R ₄ TLS(P)VSSLPGL (SEQ ID NO. 639) D ₄₃ IGS(p)ES(p)TEDQ (SEQ ID NO. 640)	glycogen synthase, rabbit muscle (4) a _{s1} -casein (4)
Casein Kinase II (CKII, CK-2)	S/T-X-X-E	A ₇₂ DSESEDEED (SEQ ID NO. 641) L ₃₇ ESEEEGVPST (SEQ ID NO. 642) E ₂₆ DNSEDEISNL (SEQ ID NO. 643)	PKA regulatory subunit, R _{II} (2) p34 ^{cdc2} , human (5) acetyl-CoA carboxylase (2)
Glycogen Synthase Kinase 3 (GSK-3)	S-X-X-S(p)	S ₆₄₁ VPPSPSLS(p) (SEQ ID NO. 644) S ₆₄₁ VPPS(p)PSLS(p) (SEQ ID NO. 645)	glycogen synthase, human (site 3b) (6,2) glycogen synthase, human (site 3a) (6,2)
Cdc2 Protein Kinase	S/T-P-X-R/K°	P ₁₃ AKTPVK (SEQ ID NO. 646) H ₁₂₂ STPPKKRK (SEQ ID NO. 647)	histone H1, calf thymus (2) large T antigen (2)
Calmodulin- dependent Protein Kinase II (CaMK II)	R-X-X-S/T R-X-X-S/T-V	N₂YLRRRLSDSN (SEQ ID NO. 648) K₁91MARVFSVLR	synapsin (site 1) (2) calcineurin (2)

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		(SEQ ID NO. 649)	
Mitogen-activated Protein Kinase (Extracellular Signal-regulated Kinase) (MAPK, Erk)	P-X-S/T-P ^d X-X-S/T-P	P ₂₄₄ LSP (SEQ ID NO. 650) P ₉₂ SSP (SEQ ID NO. 651) V ₄₂₀ LSP (SEQ ID NO. 652)	c-Jun (7) cyclin B (7) Elk-1 (7)
cGMP-dependent Protein Kinase (cGPK)	R/K-X-S/T R/K- X -X-S/T	G ₂₆ KKRKRSRKES (SEQ ID NO. 653) F ₁ RRLSIST (SEQ ID NO. 654)	histone H2B (2) phosphorylase kinase (a chain) (2)
Phosphorylase Kinase (PhK)	K/R-X-X-S-V/I	D ₆ QEKRKQISVRG (SEQ ID NO. 655) P ₁ LSRTLSVSS (SEQ ID NO. 656)	phosphorylase (2) glycogen synthase (site 2) (2)
Protein Kinase C (PKC)	S/T-X-K/R K/R- X -X-S/T K/R-X-S/T	H ₅₉₄ EGTHSTKR (SEQ ID NO. 657) P ₁ LSRTLSVSS (SEQ ID NO. 658) Q ₄ KRPSQRSKYL (SEQ ID NO. 659)	fibrinogen (2) glycogen synthase (site 2) (2) myelin basic protein (2)
Abl Tyrosine Kinase	I/V/L-Y-X-X-P/F°		
Epidermal Growth Factor Receptor Kinase (EGF-RK)	E/D-Y-X E/D-Y-I/L/V	R ₁₁₆₈ ENAEYLRVAP (SEQ ID NO. 660) A ₇₆₇ EPDYGALYE (SEQ ID NO. 661)	autophosphorylation (2) phospholipase C-g(2)

Single-letter Amino Acid Code:

A = alanine, C = cysteine, D = aspartic acid, E = glutamic acid, F = phenylalanine, G = glycine, H = histidine, I = isoleucine, K = lysine, L = leucine, M = methionine, N = asparagine, P = proline, Q = glutamine, R = arginine, S = serine, T = threonine, W = tryptophan, V = valine, Y = tryrosine, X = any amino acid

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Recognition motifs are taken from Pearson and Kemp (*supra*) except where noted. Consult Pearson and Kemp for a comprehensive list of phosphorylation site sequences and specificity motifs.

 $_{\rm b}$ Subscripted numbers refer to the position of the first residue within the given polypeptide chain.

^c From (1).

^d From (7).

^eFrom (8). Se e refs (8) and (9) for discussion of substrate recognition by Abl.

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Please replace the Table SARS appearing on pages 128-145 of the application as filed with the following, amended Table SARS:

Table SARS List of SARS virus-specific PETs

```
>gi|30795153|gb|AAP41045.1| Orf10 [SARS coronavirus Tor2]
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                                                          SLCSCICT (SEO ID NO. 664)
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                                                          LCSCICTV (SEQ ID NO. 665)
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                                                          CSCICTVV (SEQ ID NO. 666)
>gi|30795153|gb|AAP41045.1| Orf10 [SARS coronavirus Tor2]
                                                          SCICTVVQ (SEQ ID NO. 667)
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                                                          CICTVVQR (SEO ID NO. 668)
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                                                          ICTVVQRC (SEO ID NO. 669)
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                                                          CTVVORCA (SEO ID NO. 670)
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                                                          VLEDPCKV (SEQ ID NO. 672)
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                                                          LEDPCKVQ (SEQ ID NO. 673)
>gi|30795153|gb|AAP41045.1| Orf10 [SARS coronavirus Tor2]
                                                         EDPCKVQH (SEO ID NO. 674)
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>gi|32187352|gb|AAP72981.1| Orf7b [SARS coronavirus HSR 1] DLEEPCTK (SEQ ID NO. 710)
>gi|32187352|gb|AAP72981.1| Orf7b [SARS coronavirus HSR 1] LEEPCTKV (SEO ID NO. 711)
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>gi|32187350|gb|AAP72979.1| Orf6 [SARS coronavirus HSR 1] EPMELBYP (SEQ ID NO. 714)
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EEPMELDY (SEQ ID NO. 716)

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KPLLAPHH (SEQ ID NO. 752)

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- >gi|31747859|gb|AAP69660.1| uncharacterized protein 9c [SARS coronavirus ZJ-HZ01] VKLPSRYC (SEQ ID NO. 786)
- >gi|31747859|gb|AAP69660.1| uncharacterized protein 9c [SARS coronavirus ZJ-HZ01] KLPSRYCC (SEQ ID NO. 787)
- >gi|31416298|gb|AAP51230.1| envelope protein E [SARS coronavirus GZ01] VLLFLAFM (SEQ ID NO. 788)
- >gi|31416298|gb|AAP51230.1| envelope protein E [SARS coronavirus GZ01] LLFLAFMV (SEQ ID NO. 789)
- >gi|31416298|gb|AAP51230.1| envelope protein E [SARS coronavirus GZ01] LFLAFMVF (SEO ID NO. 790)
- >gi|31416298|gb|AAP51230.1| envelope protein E [SARS coronavirus GZ01] FLAFMVFL (SEQ ID NO. 791)
- >gi|31416298|gb|AAP51230.1| envelope protein E [SARS coronavirus GZ01] LAFMVFLL (SEQ ID NO. 792)
- >gi|31416298|gb|AAP51230.1| envelope protein E [SARS coronavirus GZ01] AFMVFLLV (SEQ ID NO. 793)
- >gi|31416298|gb|AAP51230.1| envelope protein E [SARS coronavirus GZ01] FMVFLLVT (SEQ ID NO. 794)
- >gi|31416298|gb|AAP51230.1| envelope protein E [SARS coronavirus GZ01] MVFLLVTL (SEO ID NO. 795)
- >gi|29836499|ref|NP_828854.1| small envelope protein; protein sM; protein E [SARS coronavirus] VLLFLAFV (SEQ ID NO. 796)

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- >gi|29836499|ref|NP_828854.1| small envelope protein; protein sM; protein E [SARS coronavirus] LLFLAFVV (SEQ ID NO. 797)
- >gi|29836499|ref|NP_828854.1| small envelope protein; protein sM; protein E [SARS coronavirus] LFLAFVVF (SEQ ID NO. 798)
- >gi|29836499|ref|NP_828854.1| small envelope protein; protein sM; protein E [SARS coronavirus] FLAFVVFL (SEO ID NO. 799)
- >gi|29836499|ref|NP_828854.1| small envelope protein; protein sM; protein E [SARS coronavirus]

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- >gi|29836499|ref|NP_828854.1| small envelope protein; protein sM; protein E [SARS coronavirus] FVVFLLVT (SEO ID NO. 802)
- >gi|29836499|ref[NP_828854.1| small envelope protein; protein sM; protein E [SARS coronavirus] VVFLLVTL (SEQ ID NO. 803)
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- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] LKILVRYN (SEO ID NO. 806)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] ERIEVRTN (SEO ID NO. 807)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] ILVRYNTR (SEQ ID NO. 808)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] LVRYNTRG (SEQ ID NO. 809)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] VRYNTRGN (SEQ ID NO. 810)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] TAAFRDVL (SEQ ID NO. 811)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] AAFRDVLV (SEQ ID NO. 812)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] AFRDVLVV (SEO ID NO. 813)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] FRDVLVVL (SEQ ID NO. 814)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] RDVLVVLN (SEQ ID NO. 815)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] DVLVVLNK (SEQ ID NO. 816)
- >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] VLVVLNKR (<u>SEQ ID NO. 817</u>) >gi|32187354|gb|AAP72983.1| Orf8b [SARS coronavirus HSR 1] LVVLNKRT (<u>SEQ ID NO. 818</u>)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01]
- MDPNQTNV (SEQ ID NO. 819)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] DPNQTNVV (SEQ ID NO. 820)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01]
- PNQTNVVP (SEQ ID NO. 821)
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- NQTNVVPP (SEQ ID NO. 822)
 >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01]
 OTNVVPPA (SEO ID NO. 823)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] TNVVPPAL (SEQ ID NO. 824)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] NVVPPALH (SEQ ID NO. 825)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] VVPPALHL (SEQ ID NO. 826)

VPPALHLV (SEQ ID NO. 827)

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 >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01]
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] PPALHLVD (SEQ ID NO. 828)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] PALHLVDP (SEO ID NO. 829)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] ALHLVDPQ (SEQ ID NO. 830)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] LHLVDPOI (SEO ID NO. 831)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] HLVDPQIQ (SEQ ID NO. 832)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] LVDPOIOL (SEO ID NO. 833)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] VDPOIOLT (SEO ID NO. 834)
- >gi|31416303|g|b|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] DPQIQLTI (SEQ ID NO. 835)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] POIOLTIT (SEQ ID NO. 836)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] OIOLTITR (SEO ID NO. 837)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] IOLTITRM (SEQ ID NO. 838)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] OLTITRME (SEQ ID NO. 839)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] LTITRMED (SEO ID NO. 840)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] TITRMEDA (SEQ ID NO. 841)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] ITRMEDAM (SEO ID NO. 842)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] TRMEDAMG (SEO ID NO. 843)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] RMEDAMGQ (SEQ ID NO. 844)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] MEDAMGOG (SEO ID NO. 845)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] EDAMGQGQ (SEQ ID NO. 846)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] DAMGQGQN (SEQ ID NO. 847)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] AMGQGQNS (SEQ ID NO. 848)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01]



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>gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] ADPKVYPI (<u>SEQ ID NO. 856</u>)

>gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] DPKVYPII (SEQ ID NO. 857)

>gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] PKVYPIIL (SEQ ID NO. 858)

>gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] KVYPIILR (SEQ ID NO. 859)

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>gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] IILRLGSQ (<u>SEQ ID NO. 863)</u>

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>gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] LRLGSQLS (SEQ ID NO. 865)

>gi|31416303|gb|AAP51235.1|*BGI-PUP7 [SARS coronavirus GZ01] RLGSQLSL (SEQ ID NO. 866)

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- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] SLSMARRN (SEQ ID NO. 872)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] LSMARRNL (SEQ ID NO. 873)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] SMARRNLD (SEO ID NO. 874)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] MARRNLDS (SEQ ID NO. 875)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] ARRNLDSL (SEQ ID NO. 876)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] RRNLDSLE (SEO ID NO. 877)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] RNLDSLEA (SEQ ID NO. 878)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] NLDSLEAR (SEO ID NO. 879)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] LDSLEARA (SEO ID NO. 880)
- >gi|31416303|gb|AAP51235.1|BGI-PUP7 [SARS coronavirus GZ01] DSLEARAF (SEQ ID NO. 881)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] SLEARAFO (SEO ID NO. 882)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] LEARAFOS (SEO ID NO. 883)
- >gi]31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] EARAFOST (SEQ ID NO. 884)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] ARAFQSTP (SEQ ID NO. 885)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] RAFQSTPI (SEQ ID NO. 886)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] AFQSTPIV (SEQ ID NO. 887)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] FQSTPIVV (SEQ ID NO. 888)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] QSTPIVVQ (SEQ ID NO. 889)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] STPIVVOM (SEQ ID NO. 890)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] TPIVVOMT (SEO ID NO. 891)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] PIVVQMTK (SEQ ID NO. 892)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] IVVOMTKL (SEO ID NO. 893)
- >gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01]

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VVQMTKLA (SEQ ID NO. 894)

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>gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] MTKLATTE (SEQ ID NO. 897)

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>gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] KLATTEEL (SEQ ID NO. 899)

>gi|31416303|gb|AAP51235.1| BGI-PUP7 [SARS coronavirus GZ01] LATTEELP (SEQ ID NO. 900)

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>gi|31416304|gb|AAP51236.1|BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] SLCSCIRT (SEQ ID NO. 911)

>gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] LCSCIRTV (SEQ ID NO. 912)

>gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] CSCIRTVV (SEQ ID NO. 913)

>gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] SCIRTVVQ (SEQ ID NO. 914)

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- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] RTVVQRCA (SEQ ID NO. 917)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] HVLEDPCP (SEQ ID NO. 918)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] VLEDPCPT (SEQ ID NO. 919)
- >gi|31416304|gb|AA\overline{P51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] LEDPCPTG (SEQ ID NO. 920)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] EDPCPTGY (SEQ ID NO. 921)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] DPCPTGYQ (SEQ ID NO. 922)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] PCPTGYQP (SEQ ID NO. 923)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] CPTGYQPE (SEQ ID NO. 924)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] PTGYQPEW (SEQ ID NO. 925)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] TGYQPEWN (<u>SEQ ID NO. 926)</u>
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] GYQPEWNI (SEQ ID NO. 927)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] YQPEWNIR (SEQ ID NO. 928)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] QPEWNIRY (SEQ ID NO. 929)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] PEWNIRYN (SEQ ID NO. 930)
 >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01]
- Sgl31416304[gb]AAF51236.1] BGI-FUP(GZ29-nt-ins) [SARS coronavirus GZ01] EWNIRYNT (SEQ ID NO. 931)

 Sgl[31416304[gb]AAP51236.1] BGI-FUP(GZ29-nt-Ins) [SARS coronavirus GZ01]
- \(\sigma_{\text{intota-q}[g]/\text{intota-ruy}(\text{q}\)\(\sigma_{\text{virial}}\) [SARS coronavirus GZ01] \(\sigma_{\text{intota-ruy}}\) \(\sigma_{\text{intota-ruy}}\) [SARS coronavirus GZ01] \(\sigma_{\text{intota-ruy}}\) [SARS coronavirus GZ01]
- NIRYNTRG (<u>SEQ ID NO. 933)</u> >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01]
- IRYNTRGN (<u>SEQ ID NO. 934)</u>
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- TAAFRDVF (SEQ ID NO. 935)

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 AAFRDVFV (SEQ ID NO. 936)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] AFRDVFVV (SEQ ID NO. 937)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] FRDVFVVL (SEQ ID NO. 938)



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- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] RDVFVVLN (SEQ ID NO. 939)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] DVFVVLNK (SEQ ID NO. 940)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] VFVVLNKR (SEQ ID NO. 941)
- >gi|31416304|gb|AAP51236.1| BGI-PUP(GZ29-nt-Ins) [SARS coronavirus GZ01] FVVLNKRT (SEQ ID NO. 942)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] MKIILFLT (SEQ ID NO. 943)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] KIILFLTL (SEQ ID NO. 944)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]
- IILFLTLI (SEQ ID NO. 945) >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]
- ILFLTLIV (SEQ ID NO. 946) >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]
- LFLTLIVF (SEQ ID NO. 947) >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]
- FLTLIVFT (SEQ ID NO. 948) >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]
- LTLIVFTS (SEQ ID NO. 949) >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] TLIVFTSC (SEQ ID NO. 950)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]
- LIVFTSCE (SEQ ID NO. 951) >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]

IVFTSCEL (SEQ ID NO. 952)

- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] VFTSCELY (SEQ ID NO. 953)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] FTSCELYH (SEQ ID NO. 954)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] TSCELYHY (SEQ ID NO. 955)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] SCELYHYO (SEQ ID NO. 956)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] CELYHYQE (SEQ ID NO. 957)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] ELYHYQEC (SEQ ID NO. 958)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LYHYOECV (SEQ ID NO. 959)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] YHYQECVR (SEQ ID NO. 960)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]

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HYQECVRG (SEQ ID NO. 961)

- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] YQECVRGT (SEQ ID NO. 962)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] QECVRGTT (SEQ ID NO. 963)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] ECVRGTTV (SEQ ID NO. 964)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] CVRGTTVL (SEO ID NO. 965)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] VRGTTVLL (SEQ ID NO. 966)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] RGTTVLLK (SEQ ID NO. 967)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] GTTVLLKE (SEQ ID NO. 968)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] TTVLLKEP (SEQ ID NO. 969)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] TVLLKEPC (SEQ ID NO. 970)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] VLLKEPCP (SEO ID NO. 971)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LLKEPCPS (SEQ ID NO. 972)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LKEPCPSG (SEQ ID NO. 973)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] KEPCPSGT (SEO ID NO. 974)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] EPCPSGTY (SEQ ID NO. 975)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] PCPSGTYE (SEQ ID NO. 976)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] CPSGTYEG (SEQ ID NO. 977)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] PSGTYEGN (SEQ ID NO. 978)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] SGTYEGNS (SEQ ID NO. 979)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] GTYEGNSP (SEQ ID NO. 980)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] TYEGNSPF (SEQ ID NO. 981)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] YEGNSPFH (SEQ ID NO. 982)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] EGNSPFHP (SEQ ID NO. 983)



>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] GNSPFHPL (SEO ID NO. 984)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] NSPFHPLA (SEO ID NO. 985)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] SPFHPLAD (SEQ ID NO. 986)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] PFHPLADN (SEQ ID NO. 987)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] FHPLADNK (SEQ ID NO. 988)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] HPLADNKF (SEO ID NO. 989)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] PLADNKFA (<u>SEQ ID NO. 990</u>)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LADNKFAL (SEO ID NO. 991)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] ADNKFALT (SEO ID NO. 992)

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>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] NKFALTCT (SEQ ID NO. 994)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] KFALTCTS (<u>SEQ ID NO. 995)</u>

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] FALTCTST (SEQ ID NO. 996) >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]

ALTCTSTH (SEQ ID NO. 997)
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LTCTSTHF (SEQ ID NO. 998)
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TCTSTHFA (SEQ ID NO. 999)
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CTSTHFAF (SEQ ID NO. 1000)
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TSTHFAFA (SEQ ID NO. 1001)

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>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] THFAFACA (SEO ID NO. 1003)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] HFAFACAD (<u>SEQ ID NO. 1004</u>)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] FAFACADG (SEQ ID NO. 1005)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]



AFACADGT (SEQ ID NO. 1006)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] FACADGTR (SEQ ID NO. 1007)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] ACADGTRH (SEQ ID NO. 1008)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] CADGTRHT (SEQ ID NO. 1009)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] ADGTRHTY (SEQ ID NO. 1010)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] DGTRHTYQ (<u>SEQ ID NO. 1011)</u>

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] GTRHTYQL (SEQ ID NO. 1012)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] TRHTYQLR (SEQ ID NO. 1013)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] RHTYQLRA (SEQ ID NO. 1014)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] HTYQLRAR (<u>SEQ ID NO. 1015)</u>

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] TYQLRARS (<u>SEQ ID NO. 1016)</u>

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] YQLRARSV (<u>SEQ ID NO. 1017)</u>

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] QLRARSVS (<u>SEQ ID NO. 1018</u>)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LRARSVSP (<u>SEQ ID NO. 1019</u>) >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]

RARSVSPK (SEQ ID NO. 1020)
>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]

ARSVSPKL (<u>SEQ ID NO. 1021)</u> >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]

RSVSPKLF (SEQ ID NO. 1022)

gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]

SVSPKLFI (SEQ ID NO. 1023)

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>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] SPKLFIRQ (<u>SEQ ID NO. 1025)</u>

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] PKLFIRQE (SEQ ID NO. 1026)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] KLFIRQEE (SEQ ID NO. 1027)

>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LFIRQEEV (SEQ ID NO. 1028)



- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] FIRQEEVQ (SEQ ID NO. 1029)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] IRQEEVQQ (SEQ ID NO. 1030)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] RQEEVQQE (SEQ ID NO. 1031)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] QEEVQQEL (SEQ ID NO. 1032)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] EEVOOELY (SEQ ID NO. 1033)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] EVQQELYS (SEQ ID NO. 1034)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] VQQELYSP (SEQ ID NO. 1035)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]
 OOELYSPL (SEO ID NO. 1036)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] QELYSPLF (SEQ ID NO. 1037)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] ELYSPLFL (SEQ ID NO. 1038)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LYSPLFLI (SEQ ID NO. 1039)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] YSPLFLIV (SEO ID NO. 1040)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] SPLFLIVA (<u>SEQ ID NO. 1041)</u>
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] PLFLIVAA (SEQ ID NO. 1042)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LFLIVAAL (SEQ ID NO. 1043)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] FLIVAALV (SEQ ID NO. 1044)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LIVAALVF (SEQ ID NO: 1045)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]
 IVAALVFL (SEQ ID NO. 1046)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] VAALVFLI (SEQ ID NO. 1047)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] AALVFLIL (SEQ ID NO. 1048)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] ALVFLILC (SEQ ID NO. 1049)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LVFLILCF (SEO ID NO. 1050)
- >gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1]

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VFLILCFT (SEQ ID NO. 1051)

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>gi|31581511|gb|AAP33703.1| Orf7a [SARS coronavirus Frankfurt 1] LILCFTIK (SEQ ID NO. 1053)

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FTIKRKTE (<u>SEQ ID NO. 1057)</u>
>gi|30026017|gb|AAP04587.1| RNA-directed RNA polymerase [SARS coronavirus Taiwan]

ILSDDGVX (SEO ID NO. 1058)

>gi[30026017]gb|AAP04587.1| RNA-directed RNA polymerase [SARS coronavirus Taiwan]

LSDDGVXV (SEO ID NO. 1059)

>gi|30026017|gb|AAP04587.1| RNA-directed RNA polymerase [SARS coronavirus Taiwan] SDDGVXVL (SEQ ID NO. 1060)

>gi|30026017|gb|AAP04587.1| RNA-directed RNA polymerase [SARS coronavirus Taiwan] DDGVXVLN (SEQ ID NO. 1061)

>gi|30275671|gb|AAP30032.1| putative uncharacterized protein 2 [SARS coronavirus BJ01] LLIQQWIP (SEQ ID NO. 1062)

>gi|30275671|gb|AAP30032.1| putative uncharacterized protein 2 [SARS coronavirus BJ01] LIQQWIPF (SEQ ID NO. 1063)

>gi|30275671|gb|AAP30032.1| putative uncharacterized protein 2 [SARS coronavirus BJ01] IQQWIPFM (SEQ ID NO. 1064)

>gi|30275671|gb|AAP30032.1| putative uncharacterized protein 2 [SARS coronavirus BJ01] QQWIPFMM (SEQ ID NO. 1065)

>gi|30275671|gb|AAP30032.1| putative uncharacterized protein 2 [SARS coronavirus BJ01] QWIPFMMS (SEQ ID NO. 1066)

>gi|30275671|gb|AAP30032.1| putative uncharacterized protein 2 [SARS coronavirus BJ01] WIPFMMSR (SEQ ID NO. 1067)

>gi|30275671|gb|AAP30032.1| putative uncharacterized protein 2 [SARS coronavirus BJ01] IPFMMSRR (SEQ ID NO. 1068)

>gi]30275671|gb|AAP30032.1| putative uncharacterized protein 2 [SARS coronavirus BJ01] PFMMSRRR (SEQ ID NO. 1069)

>gi|31416297|gb|AAP51229.1| BGI-PUP2 [SARS coronavirus GZ01]

QIQLSLLQ (SEQ ID NO. 1070)

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>giJ31416297[gb|AAP51229.1] BGI-PUP2 [SARS coronavirus GZ01] QLSLLQVT (<u>SEQ ID NO. 1072)</u>

>gi|31416297|gb|AAP51229.1| BGI-PUP2 [SARS coronavirus GZ01] LSLLQVTA (SEQ ID NO. 1073)

>gi|31581509|gb|AAP33701.1| membrane protein M [SARS coronavirus Frankfurt 1] ACFVLAVV (SEO ID NO. 1092)

>gi|31581509|gb|AAP33701.1| membrane protein M [SARS coronavirus Frankfurt 1] CFVLAVVY (SEQ ID NO. 1093)

>gi|31581509|gb|AAP33701.1| membrane protein M [SARS coronavirus Frankfurt 1] FVLAVVYR (SEO ID NO. 1094)

>gi|31581509|gb|AAP33701.1| membrane protein M [SARS coronavirus Frankfurt 1] VLAVVYRI (SEQ ID NO. 1095)

>gi|31581509|gb|AAP33701.1| membrane protein M [SARS coronavirus Frankfurt 1] LAVVYRIN (SEQ ID NO. 1096)

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- >gi|31581509|gb|AAP33701.1| membrane protein M [SARS coronavirus Frankfurt 1] AVVYRINW (SEQ ID NO. 1097)
- >gi|31581509|gb|AAP33701.1| membrane protein M [SARS coronavirus Frankfurt 1] VVYRINWV (SEQ ID NO. 1098)
- >gi|30027623|gb|AAP13444.1| M protein [SARS coronavirus Urbani] HLRMAGHP (SEO ID NO. 1099)
- >gi|30027623|gb|AAP13444.1| M protein [SARS coronavirus Urbani] LRMAGHPL (SEQ ID NO. 1100)
- >gi|30027623|gb|AAP13444.1| M protein [SARS coronavirus Urbani] RMAGHPLG (SEQ ID NO. 1101)
- >gi|30027623|gb|AAP13444.1| M protein [SARS coronavirus Urbani] MAGHPLGR (SEQ ID NO. 1102)
- >gi|30027623|gb|AAP13444.1| M protein [SARS coronavirus Urbani] AGHPLGRC (SEO ID NO. 1103)
- >gi|30027623|gb|AAP13444.1| M protein [SARS coronavirus Urbani] GHPLGRCD (SEO ID NO. 1104)
- >gi|30027623|gb|AAP13444.1| M protein [SARS coronavirus Urbani] HPLGRCDI (SEQ ID NO. 1105)
- >gi|30027623|gb|AAP13444.1| M protein [SARS coronavirus Urbani] PLGRCDIK (SEO ID NO. 1106)
- >gi|30275670|gb|AAP30031.1| putative uncharacterized protein 1 [SARS coronavirus BJ01] LCWKCKSO (SEO ID NO. 1107)
- >gi|30275670|gb|AAP30031.1| putative uncharacterized protein 1 [SARS coronavirus BJ01] CWKCKSON (SEO ID NO. 1108)
- >gi|30275670|gb|AAP30031.1| putative uncharacterized protein 1 [SARS coronavirus BJ01] WKCKSONP (SEO ID NO. 1109)
- >gi|30275670|gb|AAP30031.1| putative uncharacterized protein 1 [SARS coronavirus BJ01] KCKSONPL (SEO ID NO. 1110)
- >gi|30275670|gb|AAP30031.1| putative uncharacterized protein 1 [SARS coronavirus BJ01] CKSQNPLL (SEQ ID NO. 1111)
- >gi|30275670|gb|AAP30031.1| putative uncharacterized protein 1 [SARS coronavirus BJ01] KSONPLLY (SEO ID NO. 1112)
- >gi|30275670|gb|AAP30031.1| putative uncharacterized protein 1 [SARS coronavirus BJ01]
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- >gi|30275670|gb|AAP30031.1| putative uncharacterized protein 1 [SARS coronavirus BJ01] QNPLLYDA (SEQ ID NO. 1114)
- >gi|31416296|gb|AAP51228.1| BGI-PUP1 [SARS coronavirus GZ01] TDTIVVTA (SEQ ID NO. 1115)
- >gi|31416296|gb|AAP51228.1| BGI-PUP1 [SARS coronavirus GZ01] DTIVVTAG (SEQ ID NO. 1116)
- >gi|31416296|gb|AAP51228.1| BGI-PUP1 [SARS coronavirus GZ01] TIVVTAGD (SEQ ID NO. 1117)
- >gi|31416296|gb|AAP51228.1| BGI-PUP1 [SARS coronavirus GZ01] IVVTAGDG (SEQ ID NO. 1118)
- >gi|31416296|gb|AAP51228.1| BGI-PUP1 [SARS coronavirus GZ01]

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VVTAGDGI (SEQ ID NO. 1119)

>gi|31416296|gb|AAP51228.1| BGI-PUP1 [SARS coronavirus GZ01] VTAGDGIS (SEQ ID NO. 1120)

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>gi|31416296|gb|AAP51228.1| BGI-PUP1 [SARS coronavirus GZ01] SEDWHSGV (<u>SEQ ID NO. 1127</u>)

>gi|31416296|gb|AAP51228.1| BGI-PUP1 [SARS coronavirus GZ01] EDWHSGVK (SEQ ID NO. 1128)

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>gi|31416296|gb|AAP51228.1| BGI-PUP1 [SARS coronavirus GZ01] WHSGVKDY (SEQ ID NO. 1130)

>gi|30795146|gb|AAP41038.1| Orf3 [SARS coronavirus Tor2] FMRFFTLR (SEO ID NO. 1131) >gi|30795146|gb|AAP41038.1| Orf3 [SARS coronavirus Tor2] MRFFTLRS (SEO ID NO. 1132) >gi|30795146|gb|AAP41038.1| Orf3 [SARS coronavirus Tor2] RFFTLRSI (SEQ ID NO. 1133) >gi|30795146|gb|AAP41038.1| Orf3 [SARS coronavirus Tor2] FFTLRSIT (SEQ ID NO. 1134) >gi|30795146|gb|AAP41038.1| Orf3 [SARS coronavirus Tor2] FTLRSITA (SEQ ID NO. 1135) >gi|30795146|gb|AAP41038.1| Orf3 [SARS coronavirus Tor2] TLRSITAO (SEO ID NO. 1136) >gi|30795146|gb|AAP41038.1| Orf3 [SARS coronavirus Tor2] LRSITAQP (SEQ ID NO. 1137) >gi|30795146|gb|AAP41038.1| Orf3 [SARS coronavirus Tor2] RSITAQPV (SEQ ID NO. 1138)

>gi|30421455|gb|AAP30714.1| putative nucleocapsid protein [SARS coronavirus CUHK-Su10] RSSSRSRC (SEO ID NO. 1139)

>gi[30421455]gb]AAP30714.1| putative nucleocapsid protein [SARS coronavirus CUHK-Su10] SSSRSRCN (SEQ ID NO. 1140)
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SRSRCNSR (SEQ ID NO. 1142)

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RSRCNSRN (SEQ ID NO. 1143)

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SRCNSRNS (SEQ ID NO. 1144)

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- >gi|30421455|gb|AAP30714.1| putative nucleocapsid protein [SARS coronavirus CUHK-Su10] CNSRNSTP (SEQ ID NO. 1146)
- >gi|31540949|gb|AAP49024.1| nucleocapsid protein [SARS coronavirus] PQGLPNNI (SEQ ID NO. 1147)
- >gi|31540949|gb|AAP49024.1| nucleocapsid protein [SARS coronavirus] OGLPNNIA (SEO ID NO. 1148)
- >gi|31540949|gb|AAP49024.1| nucleocapsid protein [SARS coronavirus] GLPNNIAS (SEO ID NO. 1149)
- >gi|31540949|gb|AAP49024.1| nucleocapsid protein [SARS coronavirus] LPNNIASW (SEO ID NO. 1150)
- >gi|31540949|gb|AAP49024.1| nucleocapsid protein [SARS coronavirus] PNNIASWF (SEQ ID NO. 1151)
- >gi|31540949|gb|AAP49024.1| nucleocapsid protein [SARS coronavirus] NNIASWFT (SEQ ID NO. 1152)
- >gi|31540949|gb|AAP49024.1| nucleocapsid protein [SARS coronavirus] NIASWFTA (SEQ ID NO. 1153)
- >gi|31540949|gb|AAP49024.1| nucleocapsid protein [SARS coronavirus] IASWFTAL (SEO ID NO. 1154)
- >gi|31581505|gb|AAP33697.1| spike protein S [SARS coronavirus Frankfurt 1] HTSPDVDF (SEQ ID NO. 1155)
- >gi|31581505|gb|AAP33697.1| spike protein S [SARS coronavirus Frankfurt 1] TSPDVDFG (SEO ID NO. 1156)
- >gi|31581505|gb|AAP33697.1| spike protein S [SARS coronavirus Frankfurt 1] SPDVDFGD (SEO ID NO. 1157)
- >gi|31581505|gb|AAP33697.1| spike protein S [SARS coronavirus Frankfurt 1] PDVDFGDI (SEQ ID NO. 1158)
- >gi|31581505|gb|AAP33697.1| spike protein S [SARS coronavirus Frankfurt 1] DVDFGDIS (SEO ID NO. 1159)
- >gi|31581505|gb|AAP33697.1| spike protein S [SARS coronavirus Frankfurt 1] VDFGDISG (SEQ ID NO. 1160)
- >gi|31581505|gb|AAP33697.1| spike protein S [SARS coronavirus Frankfurt 1] DFGDISGI (SEQ ID NO. 1161)
- >gi31581505[gb]AAP33697.1] spike protein S [SARS coronavirus Frankfurt 1] FGDISGIN (SEQ ID NO. 1162) >gi31416295[gb]AAP51227.1] spike glycoprotein S [SARS coronavirus GZ01]
- Sgij31416293[gb]AAP31227.1] spike glycoprotein S [SARS coronavirus GZ01]
 RAILTAFL (SEQ ID NO. 1163)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] AILTAFLP (SEQ ID NO. 1164)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] ILTAFLPA (SEQ ID NO. 1165)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] LTAFLPAQ (SEQ ID NO. 1166)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] TAFLPAQD (SEQ ID NO. 1167)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01]



AFLPAQDT (SEQ ID NO. 1168)

- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] FLPAQDTW (SEQ ID NO. 1169)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] LPAQDTWG (SEQ ID NO. 1170)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] NFRVVPSR (SEQ ID NO. 1171)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] FRVVPSRD (SEQ ID NO. 1172)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] RVVPSRDV (SEQ ID NO. 1173)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] VVPSRDVV (SEQ ID NO. 1174)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] VPSRDVVR (SEQ ID NO. 1175)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] PSRDVVRF (SEQ ID NO. 1176)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] SRDVVRFP (SEO ID NO. 1177)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] RDVVRFPN (SEO ID NO. 1178)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] VYAWERKR (SEQ ID NO. 1179)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] YAWERKRI (SEO ID NO. 1180)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] AWERKRIS (SEQ ID NO. 1181)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] WERKRISN (SEQ ID NO. 1182)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] ERKRISNC (SEO ID NO. 1183)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] RKRISNCV (SEQ ID NO. 1184)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] KRISNCVA (SEQ ID NO. 1185)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] RISNCVAD (<u>SEQ ID NO. 1186</u>)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] YRVVVLSY (SEQ ID NO. 1187)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] RVVVLSYE (SEQ ID NO. 1188)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] VVVLSYEL (SEQ ID NO. 1189)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] VVLSYELL (SEQ ID NO. 1190)



- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] VLSYELLN (SEQ ID NO. 1191)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] LSYELLNA (SEQ ID NO. 1192)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] SYELLNAP (SEQ ID NO. 1193)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] YELLNAPA (SEQ ID NO. 1194)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] YKTPTLKD (SEQ ID NO. 1195)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] KTPTLKDF (SEQ ID NO. 1196)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] TPTLKDFG (SEQ ID NO. 1197)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] PTLKDFGG (SEQ ID NO. 1198)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] TLKDFGGF (SEQ ID NO. 1199)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] LKDFGGFN (SEQ ID NO. 1200)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] KDFGGFNF (SEQ ID NO. 1201)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] DFGGFNFS (SEQ ID NO. 1202)
- >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01] ILPDPLKS (SEQ ID NO. 1203)
- >gi[31416295]gb]AAP51227.1] spike glycoprotein S [SARS coronavirus GZ01] LPDPLKST (<u>SEO ID NO. 1204</u>) >gi[31416295]gb]AAP51227.1] spike glycoprotein S [SARS coronavirus GZ01]
- PDPLKSTK (SEQ ID NO. 1205)

 >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01]
- >gli31416295]gbJAAP51227.1] spike glycoprotein S [SARS coronavirus GZ01] DPLKSTKR (<u>SEQ ID NO. 1206</u>)
 >gli31416295[gbJAAP51227.1] spike glycoprotein S [SARS coronavirus GZ01]
- PLKSTKRS (SEQ ID NO. 1207)
 >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01]
- LKSTKRSF (SEQ ID NO. 1208)
 >gi|31416295|gb|AAP51227.1| spike glycoprotein S [SARS coronavirus GZ01]
- KSTKRSFI (SEQ ID NO. 1209)

 >gi[31416295]gbb/AP51227.11 spike glycoprotein S [SARS coronavirus GZ01]
- Zgij31410295[gb]AAF51227.1] spike glycoprotein S [SAKS coronavirus GZ01]
 STKRSFIE (SEQ ID NO. 1210)
 Zgij30795145[gb]AAP41037.1] spike glycoprotein [SARS coronavirus Tor2]
- ILDISPCA (SEQ ID NO. 1211)
 >gi|30795145|gb|AAP41037.1| spike glycoprotein [SARS coronavirus Tor2]
- LDISPCAF (SEQ ID NO. 1212)
- >gi|30795145|gb|AAP41037.1| spike glycoprotein [SARS coronavirus Tor2]

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      DISPCAFG (SEO ID NO. 1213)
>gi|30795145|gb|AAP41037.1| spike glycoprotein [SARS coronavirus Tor2]
      ISPCAFGG (SEQ ID NO. 1214)
>gi|30795145|gb|AAP41037.1| spike glycoprotein [SARS coronavirus Tor2]
      SPCAFGGV (SEQ ID NO. 1215)
>gi|30795145|gb|AAP41037.1| spike glycoprotein [SARS coronavirus Tor2]
      PCAFGGVS (SEQ ID NO. 1216)
>gi|30795145|gb|AAP41037.1| spike glycoprotein [SARS coronavirus Tor2]
      CAFGGVSV (SEQ ID NO. 1217)
>gi|30795145|gb|AAP41037.1| spike glycoprotein [SARS coronavirus Tor2]
      AFGGVSVI (SEO ID NO. 1218)
>gi|30023954|gb|AAP13567.1| putative E2 glycoprotein precursor [SARS coronavirus CUHK-W1]
      AFSPAODT (SEO ID NO. 1219)
>gi|30023954|gb|AAP13567.1| putative E2 glycoprotein precursor [SARS coronavirus CUHK-W1]
      FSPAQDTW (SEQ ID NO. 1220)
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      SPAODTWG (SEO ID NO. 1221)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
      DALCEKAS (SEQ ID NO. 1222)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
      ALCEKASK (SEQ ID NO. 1223)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
      LCEKASKY (SEO ID NO. 1224)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
      CEKASKYL (SEQ ID NO. 1225)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
      EKASKYLP (SEQ ID NO. 1226)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01] KASKYLPI (SEQ ID NO. 1227)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01] ASKYLPID (SEQ ID NO. 1228)
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>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01] SVIDLLLN (SEO ID NO. 1230)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01] LLLNDFVE (SEQ ID NO. 1231)
>gi|31416293|gb|AAP51225.1| orflab [SARS coronavirus GZ011 LLNDFVEI (SEO ID NO. 1232)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01] LNDFVEII (SEQ ID NO. 1233)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01] NDFVEIIK (SEQ ID NO. 1234)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
      LVDSDLNE (SEQ ID NO. 1235)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
      VDSDLNEF (SEO ID NO. 1236)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
      DSDLNEFV (SEO ID NO. 1237)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
      SDLNEFVS (SEO ID NO. 1238)
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>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]

DLNEFVSD (SEQ ID NO. 1239)

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>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
       LNEFVSDA (SEO ID NO. 1240)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
       NEFVSDAD (SEQ ID NO. 1241)
>gi|31416293|gb|AAP51225.1| orflab [SARS coronavirus GZ01] EFVSDADS (SEQ ID NO. 1242)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
       ANYIFWRK (SEQ ID NO. 1243)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
      NYIFWRKT (SEO ID NO. 1244)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01]
       YIFWRKTN (SEO ID NO. 1245)
>gi|31416293|gb|AAP51225.1| orflab [SARS coronavirus GZ01] IFWRKTNP (SEQ ID NO. 1246)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01] FWRKTNPI (SEQ ID NO. 1247)
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01] WRKTNPIQ (SEQ ID NO.
>gi|31416293|gb|AAP51225.1| orf1ab [SARS coronavirus GZ01] RKTNPIQL (SEQ ID NO. 1249)
>gi|31416293|gb|AAP51225.1| orflab [SARS coronavirus GZ01] KTNPIQLS (SEQ ID NO. 1250)
>gi|30795144|gb|AAP41036.1| replicase 1AB [SARS coronavirus Tor2]
      SADASTFF (SEQ ID NO. 1251)
>gi|30795144|gb|AAP41036.1| replicase 1AB [SARS coronavirus Tor2]
      ADASTFFK (SEQ ID NO. 1252)
>gi|30795144|gb|AAP41036.1| replicase 1AB [SARS coronavirus Tor2]
      DASTFFKR (SEO ID NO. 1253)
>gi|30795144|gb|AAP41036.1| replicase 1AB [SARS coronavirus Tor2]
      ASTFFKRV (SEO ID NO. 1254)
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      STFFKRVC (SEO ID NO. 1255)
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      TFFKRVCG (SEO ID NO. 1256)
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      FFKRVCGV (SEQ ID NO. 1257)
>gi|30795144|gb|AAP41036.1| replicase 1AB [SARS coronavirus Tor2]
      FKRVCGVS (SEO ID NO. 1258)
>gi|30795144|gb|AAP41036.1| replicase 1AB [SARS coronavirus Tor2]
      KRVCGVSA (SEO ID NO. 1259)
>gi|31581504|gb|AAP33696.1| polyprotein 1ab [SARS coronavirus Frankfurt 1]
      ELFYSYAI (SEQ ID NO. 1260)
>gi|31581504|gb|AAP33696.1| polyprotein 1ab [SARS coronavirus Frankfurt 1]
      LFYSYAIH (SEO ID NO. 1261)
>gi|31581504|gb|AAP33696.1| polyprotein 1ab [SARS coronavirus Frankfurt 1]
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FYSYAIHH (SEQ ID NO. 1262)

YSYAIHHD (SEQ ID NO. 1263)

SYAIHHDK (SEQ ID NO. 1264)

>gi|31581504|gb|AAP33696.1| polyprotein 1ab [SARS coronavirus Frankfurt 1]

>gi|31581504|gb|AAP33696.1| polyprotein 1ab [SARS coronavirus Frankfurt 1]

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>gi|31581504|gb|AAP33696.1| polyprotein 1ab [SARS coronavirus Frankfurt 1] YAIHHDKF (SEQ ID NO. 1265)

>gi|31581504|gb|AAP33696.1| polyprotein 1ab [SARS coronavirus Frankfurt 1] AIHHDKFT (SEQ ID NO. 1266)

>gi|31581504|gb|AAP33696.1| polyprotein 1ab [SARS coronavirus Frankfurt 1] IHHDKFTD (SEQ ID NO. 1267) Amendment and Response to Of Action U.S. Serial No.: 10/712,425 Atty Docket: EPT-001C1 Page 39 of 45

Please replace the Table bridging pages 146-147 of the application as filed with the following, amended Table. Please note that only the SEQ ID NOs have been added to this Table. The underlined portions of the sequences in this Table appear underlined in the application as filed.

PET		LSEPAELTDAVK (SEQ ID NO. 1280)	AA Differences
-	NNP1	DEPVELTSAPTGHTFS (SEQ ID NO. 1281)	2
-	NNP2	AGEAAELQDAEVESSAK (SEQ ID NO. 1282)	2
-	NNP3	LQEPAELVES DGVPK (SEQ ID NO. 1283)	3
-	NNP4	AQPAELVDSSGW (SEQ ID NO. 1284)	3
-	NNP5	GL <u>DPTQLTDA</u> LTQR (SEQ ID NO. 1285)	3
PET		YEVQGEVFTK (SEQ ID NO. 1286)	AA Differences
PET -	NNP1	YEVQGEVFTK (SEQ ID NO. 1286) H <u>V</u> EV <u>N</u> GEVFQK (SEQ ID NO. 1287)	AA Differences
	NNP1		
		H <u>VEVNGEVFQK (SEQ ID NO. 1287)</u>	2
	NNP2	H <u>vevngevf</u> ok (<u>SEQ ID NO. 1287</u>) SYEV <u>LGEE</u> FDR (<u>SEQ ID NO. 1288</u>)	2

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Please replace the Table on page 149 of the application as filed with the following, amended Table. Please note that only the SEQ ID NOs have been added to this Table. The underlined portions of the sequences in this Table appear underlined in the application as filed.

hKl	HSQPWQVAVYSHGWAHCGGVLVHR (SEQ ID NO. 1296)
hK2	IVGGWECEQH <u>SQPWQ</u> AA <u>LYHFSTFQ</u> CGGILVHK (<u>SEQ ID NO.1297)</u>
hK3	GSQPWQVSLFNGLSFHCAGVLVDR (SEQ ID NO. 1298)
hK4	NSQPWQVGLFEGTSLR (SEQ ID NO. 1299)
hK5	HECQPHSQPWQAALFQGQQLLCGGVLVGR (SEQ ID NO. 1300)
hK8	EDCSPHSQPWQAALVMENELFCSGVLVHR (SEQ ID NO. 1301)
hK9	VL <u>NTNGTSGF</u> LPGGYTCFPH <u>SQPWQ</u> AALLVQGR (<u>SEQ ID NO. 1302</u>)
hK10	LLEGDECAPHSQPWQVALYER (SEQ ID NO. 1303)
hK11	PNSQPWQAGLFHLTR (SEQ ID NO. 1304)
hK6	CVTAGTSCLISGWGSTSSPQLR (SEQ ID NO. 1305)
Hk7	VMDLPT QEPALGTT CYA SGWGS IEPEEFLTPK (<u>SEQ ID NO. 1306)</u>

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Please replace the first full paragraph on page 150 of the application as filed with the following, amended paragraph. Please note that only the SEQ ID NOs have been added to this paragraph. The underlined portions of the sequences in this paragraph appear underlined in the application as filed.

In addition, the same approach may be used to detect the presence of alternative splicing isoforms of any protein. For example, there are three alternative splicing forms of hK15 (* represents trypsin digestion sites):

 ${\tt hK15-V1} \qquad {\tt R*LNPQVR*PAVLPTR*CPHPGEACVV} \underline{{\tt SGWGLVSH}} {\tt EPGTAGSPR*SQG} \ (\underline{{\tt SEO\ ID}} \\ \underline{{\tt NO.\ 1307}}$

hK15-V2 R*LNPQ (SEQ ID NO. 1308)-----

hK15-V3 R*LNPQGDSGGPLVCGGILQGIVSWGDVPCDNTTK*PGVYTK (SEQ ID NO. 1309)